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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,404	05/08/2001	Gregory C. Schohn	12481-004001	1878

7590 07/13/2006

EXAMINER
BLACKWELL, JAMES H

Nokia, Inc.
Attn: Ian L. Cartier
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Mountain View, CA 94043

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,404	SCHOHN ET AL.	
	Examiner	Art Unit	
	James H. Blackwell	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17 and 19-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17 and 19-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/31/2006 has been entered.

2. It is noted that this application has been revived from abandonment through the grant of a petition to revive filed 05/31/2006 and granted 06/09/2006.

3. The original priority date is **05/08/2001**.

4. Claims 1-17-19-55 remain pending in this amendment.

5. Claims 1, 36, 38, 41-42, and 53 are independent claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-3, 9-11, 14-20, 22-25, 29-30, 34-47, and 49-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (hereinafter Adams, U.S. Patent No. 6,457,030 filed 01/29/1999, issued 09/24/2002) in view of Wang et al. (hereinafter Wang, U.S. Patent No. 6,822,663 filed 01/24/2001, issued 11/23/2004).

In regard to independent Claim 1 (and similarly independent Claims 36, 38, 41-42, and 53), Adams discloses the limitation of *receiving an electronic document represented by serial data that contains content of the document and defines an order in which respective portions of the content are to be presented on a display for viewing* in that an HTML file is requested by a pervasive computing device (e.g., PDA, cell phone; typically devices other than standard desktop computers). The requested HTML file is *analyzed* by a server (compare with the limitation of *analyzing the serial data of the electronic document)* for a link to a Content Modification File containing information about modifying HTML file elements for display via requesting computing device (the reference to *serial data* is interpreted broadly to indicate this sort of link, any other tag, or even the content of the given HTML document or Content Modification File since the Specification is unclear as to the exact meaning of serial data except to refer to structured language markup). The server (more specifically the transcoder/transformer

data processing system in communication with the web server (Col. 7, lines 43-48)) modifies the elements of an HTML document for display via the pervasive device using information within the retrieved Content Modification File (compare with the limitation of *... by at least one transformation module to determine an order of presentation of the portions of the content different from the order defined by the serial data*). The file is then displayed on the pervasive device (Fig. 1A).

Details of the modification process are illustrated in Fig. 1B.

The steps outlined in Fig. 1B would have strongly suggested to one of ordinary skill in the art at the time of invention that reordering of content takes place (Fig. 1B, steps 600, 602, 604, 606) based on the instructions contained within the Content Modification File rendering such reordering obvious. It is also noted that such conversions are also depicted in Figs. 3, 4A-C, 5A-B.

Adams also discloses that *the different order of presentation being adapted based upon a performance capability of a display of a target device* (Fig. 4C depicts alternative based on display parameters of the requesting pervasive device).

Adams fails to explicitly disclose the limitation of *generating reorganization information for use in delivering portions of the content, the reorganization information enabling presentation of the portions in the different order.* It appears that the Content Transformation Files already exist. However, Wang discloses a graphical editing tool that allows a web designer to pull up source content pages wherein the information components are identified and assigned an identifier. The identified components are graphically arranged into a result area according to the capabilities of the receiving web

enabled appliance (*generating reorganization information)*. A set of transformation rules is generated according to the graphically arranged result. These rules are then used by a server device to transform the requested source information as the web-enabled appliance requests it (see Abstract, Figs. 18a-d, 19a-b). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams and Wang as both inventions relate to the modification of documents based on a viewing device's capabilities via a set of rules. Adding the teaching of Wang offers the benefit of rearranging the ordering of the content to best fit the display of the pervasive device.

In regard to dependent Claims 2 and 3, Adams discloses that the serial data representing the electronic document is expressed in a markup language or that the markup language comprises a hypertext markup language (see rejection of Claim 1).

In regard to dependent Claim 7, Adams discloses that *the hypertext markup language comprises HTML* (see rejection of Claim 1).

In regard to dependent Claim 8, Adams discloses the limitation that *the markup language comprises PDF, postscript, SGML, PowerPoint, rich text, or unformatted* text (Fig. 5A discloses plain text within tags).

In regard to dependent Claim 9, Adams discloses the limitation that *the content of the document includes at least one of the following: text, images, tables, frames, and headings* (see Example, Col. 9, lines 36-67; Col 10, lines 1-47 depicts an HTML file containing at least images and text which are altered).

In regard to dependent Claim 10, Adams discloses the limitation where *the order in which the respective portions of the content are to be presented includes a two-dimensional layout* (Figs. 5A-B depict coding that would be rendered to a 2-D display such as a typical screen).

In regard to dependent Claim 11, Adams discloses that *the reorganization information includes an identification of a relative importance of the respective portions of the content* (Col. 8, lines 16-42; Fig. 3).

In regard to dependent Claim 14 (and similarly dependent Claim 43), Claim 14 (and similarly Claim 43) reflects the method of Claim 1 (and similarly Claims 36, 38, 41-42, and 53) and is rejected along the same rationale.

In regard to dependent Claims 15 (and similarly dependent Claim 44) and 16, Adams does not disclose the limitation that *the reorganization information includes a hyperlink to be displayed near the beginning of the document, the hyperlink pointing to a portion of the content that appears later in the original order* or *the hyperlink is included only if the location of the hyperlink in the document is separated by at least a predetermined distance from the location to which it points.* However, it would have been obvious to one of ordinary skill in the art of web page construction at the time of invention because this is one of many techniques used to assist the user with web page navigation (also known as a targeted link). The benefit of such a link would have been to take one to a specific location within a hypertext document (e.g., to find a section of the document that is off the screen).

In regard to dependent Claim 17 (and similarly dependent Claim 45), Adams does not disclose the limitation where the *reorganization information causes an automatic redirection from the first portion of the content to a later portion of the content when the document is opened for presentation*. However, it would have been obvious to one of ordinary skill in the art of web design at the time of invention to have used a HTML META command of the type <meta http-equiv="refresh" content="0; URL=http://<a relative link would go here">. The benefit would have been to redirect the user from one location on the web page to a different location on the same or a different web page, making it easier to find the correct information.

In regard to dependent Claims 19 (and similarly dependent Claims 46, 49, 51, and 54) and 20 (and similarly dependent Claims 47, 50, 52, and 55), Adams discloses the limitations that *the different order of presentation enabled by the reorganization information is adapted for a display that has a more restricted performance capability than does the performance capability of the display for which the document was originally desired* or *the more restricted display is part of a mobile phone or personal digital assistant, and the display for which the document was originally designed comprises a desktop computer monitor* (Col. 8, lines 16-42; Fig. 3; discusses reordering by priority of content) (Col. 6, lines 48-64; discuss limiting displayed elements based on a threshold). In general, Adams teaches modifications for the purpose of displaying material on pervasive devices, which include those claimed above).

In regard to dependent Claim 22, Adams discloses the limitation of *analyzing includes identifying one of the portions as containing central content of the document* (Col. 8, lines 16-42; Fig. 3; prioritizes and reorganizes based on importance of portion of document; central content would likely be more important than other content in the document).

In regard to dependent Claim 23, Adams discloses that the generating includes inserting a link from near the beginning of the first portion of the content to the beginning of the central content portion (Col. 8, lines 16-42; Fig. 3; prioritizes and reorganizes based on importance of portion of document; central content would likely be more important than other content in the document). Again, Adams does not disclose the generation of the reorganization information (the rules), but Wang does provide for such generation (as previously disclosed in rejection of Claim 1). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams and Wang as both inventions relate to the modification of documents based on a viewing device's capabilities via a set of rules. Adding the teaching of Wang offers the benefit of rearranging the ordering of the content to best fit the display of the pervasive device.

In regard to dependent Claims 24 and 25, Adams discloses the limitations of *"... moving the central content portion to near the beginning of the document"* and Claim 25, *"... altering the document so that the central content portion appears first when the document is presented"* (Col. 8, lines 16-42; Fig. 3; prioritizes and reorganizes based on importance of portion of document; central content would likely be more important than

other content in the document and if assigned an importance level would appear before other content perhaps near the beginning of the document as claimed).

In regard to dependent Claim 29, Adams discloses the limitation that *analyzing includes identifying portions of the document that should be moved relative to other portions in generating the reorganization information* (Col. 8, lines 16-42; Fig. 3; prioritizes and reorganizes based on importance of portion of document; central content would likely be more important than other content in the document and if assigned an importance level would appear before other content perhaps near the beginning of the document as claimed).

Again, Adams does not disclose the generation of the reorganization information (the rules), but Wang does provide for such generation (as previously disclosed in rejection of Claim 1). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams and Wang as both inventions relate to the modification of documents based on a viewing device's capabilities via a set of rules. Adding the teaching of Wang offers the benefit of rearranging the ordering of the content to best fit the display of the pervasive device.

In regard to dependent Claim 30, Adams discloses that *the portions that should be moved comprise images or tables* (Col. 6, lines 20-24; Content Modification File can reference images).

In regard to dependent Claim 34, Adams discloses the limitation that *the analyzing includes blocking major regions of the document* (Col. 6, lines 48-64; disclose removing content below a certain threshold).

In regard to dependent Claim 35, Adams does not specifically disclose that *the analyzing includes counting characters of text.* However, it would have been obvious to one of ordinary skill in the art at the time of invention to count characters of text as this would typically determine whether or not a given text line would fit on the screen or would need to be, for example, wrapped or shortened. The benefit would have been to determine how to display text on a given display.

In regard to dependent Claim 37, Adams suggests the limitation where *receiving other requests for portions of the content of the document different portions, and in response to the requests, returning other portions of the content using the reorganization information* in that the invention is designed to handle a variety of different devices with different display characteristics as depicted by Figs. 4A-C).

In regard to dependent Claims 39 and 40, Adams discloses the limitation that the *data structure also includes the content, the data being expressed as a modified version of an original data structure that expressed the document* and that *the modified version of the data structure includes annotations* (Col. 6, lines 3-47; disclose the use of hashes (data structures) to represent content to be altered and locating specific rules for that content in the Content Modification File).

8. Claims 4-6, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Wang, and in further view of Raghunandan (U.S. Patent No. 6,775,689 filed 06/07/2000, issued 08/10/2004).

In regard to dependent Claims 4-6, Adams and Wang both fail to disclose that *the serial data is in an email format.* However, Raghunandan does (see Abstract). Raghunandan also discloses that *the electronic mail format includes a header and a main body* (Col. 10, lines 15-61). Raghunandan also discloses that *the analyzing includes determining the start of the main body* in that the email system parses the said message to identify each segment as well as the list of recipients for each segment, as shown in block (1.2) (Col. 6, lines 41-44). In doing so, Raghunandan would have identified the main body of the email. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams, Wang, and Raghunandan as all three inventions relate to restructuring documents. Adding the teaching of Raghunandan provides the benefit of reorganizing emails.

In regard to dependent Claim 12, Adams fails to disclose that *the reorganization information includes an identification of a main block of text.* However, Raghunandan discloses that the email system parses the message to identify each segment as well as the list of recipients for each segment, as shown in block (1.2) based on profiles of the recipients (Col. 6, lines 41-44). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of

Adams and Raghunandan as both inventions relate to restructuring documents. Adding the teaching of Raghunandan provides the benefit of reorganizing emails.

In regard to dependent Claim 13, Adams fails to disclose the limitation *the analyzing includes finding an annotation inserted in the electronic document as a marker of the location of the main block of text.* However, Raghunandan teaches that the email system parses the said message to identify each segment as well as the list of recipients for each segment, as shown in block (1.2) (Col. 6, lines 41-44).

Raghunandan does not explicitly disclose an *annotation marker.* However it would have been obvious to one of ordinary skill in the art of electronic mail processing to assume that the email had the standard structure and thus had markers identifying such header information as To:, Cc:, Bcc, etc., and would have therefore been able to, at the very least, offset from those markers to identify the main block of text. The benefit would have been to locate that part of the email that was most likely to need reordering. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams and Raghunandan as both inventions relate to restructuring documents. Adding the teaching of Raghunandan provides the benefit of reorganizing emails.

9. Claims 21, 31-33, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Wang, and in further view of Ma et al. (hereinafter Ma, "A Framework for Adaptive Content Delivery in Heterogeneous Network Environments", Copyright 01/2000).

In regard to dependent Claim 21 (and similarly dependent Claim 48), Adams and Wang both fail to disclose the limitation that *presentation of the portions of the content comprises presenting the portions by speech synthesis*. However, Ma teaches Modality Transform that includes speech-to-text and text-to-speech transform (p. 3, Sec. 3.2). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams, Wang, and Ma as all three inventions relate to selective transfer of data. Adding the teaching of Ma provides the benefit of converting a document to assist the vision-impaired.

In regard to dependent Claims 31 and 32, Adams and Wang both fail to explicitly disclose the limitation that *analyzing includes identifying regions according to functions* or that *the functions include navigation and content*. However, Ma teaches Purpose Classification which identifies images, logos, or advertisements. Purpose classification of a media object can be done using content analysis techniques. It can also be achieved to some extent by matching URL strings with a pre-established database or via heuristics for associating means with certain text contained in the URLs (pp. 3-4, Sec. 3.5). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams, Wang, and Ma as all three

inventions relate to selective transfer of data. Adding the teaching of Ma provides the benefit of identifying various content components.

In regard to dependent Claim 33, Adams and Wang both fail to explicitly disclose the limitation that *the analyzing includes converting the document to a tree format*. However, Ma teaches that the Document Object is useful data structure to represent the logical structure and contents of a Web page after it is parsed in content adaptation systems. This defines the logical structure and contents of the Web page that is to be adapted. The XML Document Object Model (DOM) [16] technology can be used to represent the represent the hierarchical structure of a Web page, with node elements representing entities such as text, images, audio, and video. By using a Document Object Model to represent Web page structure, we can to perform a number of document-level adaptations to the Web page. This complements the component level adaptations that we implement, such as image scaling and video modality transform. By analyzing the contents of the Web page as a whole, we can optimize the adaptation process by identifying redundant information that can be removed from the Web page without overly compromising the informational integrity of the Web page. This page-level adaptation can be considered to be a "re-authoring" of the content [4] (Sec. 5, right column, paragraphs 1 and 2). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams, Wang, and Ma as all three inventions relate to selective transfer of data. Adding the teaching of Ma provides the benefit of a tree view, making it easier to identify different types of content.

10. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Wang, and in further view of Kanevsky (U.S. Patent No. 6,300,947 filed 07/06/1998, issued 10/09/2001).

In regard to dependent Claims 26-28, Adams and Wang both fail to explicitly disclose the limitations that *analyzing includes identifying portions of the document that should not be separated in generating the reorganization information* or that *the portions that should not be separated include at least one of the following pairs: heading and text, image and caption,* or that *paragraph and related paragraph* or *analyzing includes identifying portions of the document that should not be moved relative to other portions of the document.* However, Kanevsky discloses that another criteria for making priority decisions in order to determine what and how to display web objects is the dependencies associated with these objects. For instance, assume that an object O1 is dependent on an object O2, if one of the following conditions are fulfilled: (1) every item (or most of the items) in O2 can be accessed from O1, meaning that if object O1 is activated (e.g., by clicking a mouse on O1) then, among other things, objects that are accessible from O2 are displayed; (2) items that are accessed from O1 contain most of the information that is described in items that are accessed from O2; and (3) items that are accessed from O1 refer in some way to information that is contained in items that are accessed from O2, for example, items in O1 are titles or abstracts of articles in O2. Other criteria of dependencies, for example, indicated in cookies, can be chosen by users (Col. 11, lines 64-67; Col. 12, lines 1-12).

In addition, Kanevsky discloses that in the block 901, objects that contain or point to information with the same or similar topics are combined into one set. An icon or button is created on an adapted web page that is linked to the combined data. A new name is chosen to characterize the combined data. This name is written (or expressed graphically via some symbol) on an icon or a button. For example, in Fig. 13, a typical part of a Yahoo entry panel to news is shown (block 1501). In block 1501, a first word on each line defines a topic of subsequent links (underlined words). For example, the word BUSINESS in the first line defines the content of links Headlines, Summaries, etc.; the word TECHNOLOGY in the second line defines the content of subsequent links in this line, and so on (Col. 14, lines 15-28).

Kanevsky also discloses that he semantic interpreter module 905 separates objects on web pages that refer to different topics and combines (unifies) objects that refer to the same or similar subjects. These semantic operations are based either on instructions of web designers or may be performed automatically. The overall module 905 provides semantic interpretations of web objects that are needed for block 901. Semantic interpretations in block 901, for example, may define what objects are semantically close (i.e., have similar topics), what part of a link definition is relevant to a topic, etc (Col. 14, lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Adams, Wang, and Kanevsky as both inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

Response to Arguments

11. Applicant's arguments, see amendment, filed 05/31/2006, with respect to the rejection(s) of claim(s) 1 under Raghunandan in view of Wang have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made with respect to Adams in view of various combinations of Wang, Raghunandan, Ma, and Kanevsky. Adams is felt to disclose the limitations that the prior combinations of art failed (refer to rejection of Claim 1).

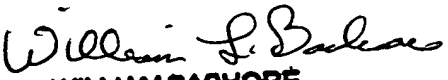
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is 571-272-4089. The examiner can normally be reached on Mon-Fri.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James H. Blackwell
06/30/2006



WILLIAM BASHORE
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